

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Oregon State Office
P.O. Box 2965
Portland, Oregon 97208**

In Reply Refer to:
1283 (OR-957/955.2) P

June 9, 2000

EMS TRANSMISSION 06/14/2000
Instruction Memorandum No. OR-2000-062
Expires: 9/30/2001

To: DMs, DSDs, Staff and Branch Chiefs

From: Associate State Director

Subject: Landlines Spatial Data Standard

Attached is the final Landlines (LLI) GIS layer data standard. All LLI data collection is to conform to this standard. Included within the data standard is the data collection and maintenance protocols and the quality control procedures to be used with this layer. A field review was conducted and changes have been incorporated into the final standard.

Transactional update tools have been developed. Field offices may begin initiating transactions as soon as a completed library access form (OR9167-5) and the name of the field office data steward have been provided to the State Office (OR955.2). The library access form may be accessed via the OR/WA Geospatial web site at: http://web.or.blm.gov/gis/docs/maplayer_request.pdf

If you have any questions about this standard or the update procedures, contact one of the following:

TITLE	NAME	PHONE NUMBER	EMAIL ADDRESS
State Data Steward	Marc Thomas	503-952-6151	m2thomas@or.blm.gov
State Data Administrator	Stanley Frazier	503-952-6009	sfrazier@or.blm.gov
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Signed by:
Charles E. Wassinger

Authenticated by:
Mary O'Leary
Management Assistant

1 Attachment
1 - Landlines Final Spatial Data Standard (11 pp)

Distribution
WO500 - C. Ridge (Rm 775, LS)

Landlines Spatial Data Standard

Date: 05/30/2000

Project Name:	SPATIAL DATA STANDARDS		
Project Code:	SDS		
Name:	Landlines		
Code:	LLI		
Label:			
Author:	Data Administration		
Version:			
Created On:	07/10/1998 2:10 PM	Modified On:	05/30/2000 9:16 AM

LAYER DESCRIPTION

This layer portrays information related to the PLSS, jurisdiction, land category, rights, and subsurface minerals information of lands in the state of Oregon and in extreme southeast Washington.

SECURITY

This layer does not contain any sensitive information that might be withheld under the Freedom of Information Act and is generally considered releasable to the public.

STATE DATA STEWARD

The State Data Steward for the Landlines Spatial Data Layer is: Marc Thomas Oregon State Office (OR957) 503-952-6151

DATA COLLECTION AND MAINTENANCE PROTOCOLS

Accuracy Requirements: A wide range of positional accuracy is reflected within the Landlines theme and is more thoroughly discussed under the attributes for the GCD theme. No known polygon attribute errors exist.

Update Transactions: The unit of processing for updating the LLI theme is the 7.5 minute quadrangle. Updating the spatial component of LLI that reflects federal status will be performed by the District Cadastral Survey staff for the westside, and the State Office GCDB for the eastside, unless the necessary points and lines already exist in the GCD theme. This means that tile based transactions will be initiated by editors within the districts or state office to update the theme. Editors will "check-out" their districts LLI points. They will then add, delete, or modify points prior to "check-in." Utilities within OR/WA BLMs Update Tools User Interface are used to perform these transactions processes.

Update Frequency: Once the LLI theme has been created for a district, it is the responsibility of the District Data Steward to ensure that the theme remains current. Bringing the theme up to a current level should take place at least once per year if not more frequently. This update cycle should begin and end at the start of the fiscal year.

QUALITY CONTROL

Transaction Level: This level of quality control occurs when a district has completed an update to the LLI theme and the resulting coverage is provided back for inclusion into the GIS corporate library. All text field data must be filled out in upper case. Upon check-in, all attributes are checked to assure that they conform to the data standard.

Monitoring level QC: Monitoring level quality control involves a periodic evaluation across the full extent of the LLI theme. The State Data Steward in conjunction with the District Data Stewards is responsible for the reviewing the LLI theme at least once per year to assure that established protocols are being followed in the creation and maintenance of the theme. There is a wide variation in positional accuracy allowed within the theme. Evaluating the location of points requires a combination of checking positional accuracy (relating to true ground position) as well as accuracy relative to other features within the GIS such as roads and other use lines. The latter may be more important in areas where positional reliability is greater than 40 feet. The State Data Steward should work with the GIS staff to develop monitoring level quality control plots and/or reports. Suggested checks include the following: (1) check for adequate spatial extent of coverage within each district, (2) check for vertical integration between the LLI theme and other reference themes such as GCD, roads, and streams, (3) check to validate that the theme is being kept current. In addition, the LLI theme metadata should be reviewed annually to ensure that it is up-to-date and accurately describes the theme.

DATA ORGANIZATION/STRUCTURE

The Landlines layer is composed of three types of data (nodes, polygons, and lines). What follows is a table for each type of data followed by a description of the attributes for that type. Within ArcInfo, each type is a different attribute table (lli nodes, lli polys, lli arcs). In the tables and attribute descriptions below, the default ArcInfo attributes are not included.

CORNER NODE (POINT ATTRIBUTE TABLE)

Attribute List

Name	Code	Type
LANDLINES TOWNSHIP RANGE CODE	TWNRNG	A12
LANDLINES POINT IDENTIFICATION NUMBER	POINT-ID	A7
LANDLINES CORNER IDENTIFICATION NUMBER	CORNER-ID	A19

LANDLINES TOWNSHIP RANGE CODE (TWNRNG)

Description

[Required]

A compound attribute showing both Township (Tier) and Range for a particular polygon. A township is defined as a Public Land Survey System unit of land north or south of a baseline. A range is defined as a Public Land Survey System unit of land east or west from a Principal Meridian. FOIA Category: Public

Annotation

The LR2000 code of the township, which is defined as: 000XZY000XZY;

000 = whole township (or range) numbers, right justified

X = fractional township (range) with 1= 1/4 township (or range)
 2= 1/2 township (or range)
 3= 3/4 township (or range)
 0= not a fractional township (or range)

Z = indicator of duplicate township/range
 0=default
 A=duplicate

Y = direction from the baseline (N or S) for townships and direction from the principal meridian (E or W) for range

Note: BLM Cadastral Survey does not recognize 1/4 and 3/4 townships.

LANDLINES POINT IDENTIFICATION NUMBER (POINT-ID)

Description

[Required]

A unique identification number for each point within a township is used in conjunction with TWRNG to uniquely identify a point (see CORNER-ID).

FOIA Category: Public

LANDLINES CORNER IDENTIFICATION NUMBER (CORNER-ID)

Description

[Required]

A combination of TWRNG and POINT-ID in order to create an ID that is unique throughout the coverage (not just within one township).

FOIA Category: Public

JURISDICTION POLYGONS (POLYGON ATTRIBUTE TABLE)

Attribute List

Name	Code	Type
LANDLINES SECTION NUMBER	SECTION	A7
LANDLINES TOWNSHIP RANGE CODE	TWRNG	A12
LANDLINES TOWNSHIP RANGE NAME	T-R	A17
LANDLINES SURFACE JURISDICTION CODE	JURISCODE	VA5
LANDLINES SURFACE JURISDICTION NAME	JURISNAME	VA30
LANDLINES LAND CATEGORY CODE	LANDCATCODE	A5
LANDLINES SURFACE CONVEYANCE RIGHTS CODE	RGTS CODE	VA5
LANDLINES SUBSURFACE MINERALS CODE	MINCODE	A5
LANDLINES PUBLIC LAND SURVEY SOURCE AGENCY NAME	PLSSOURCE	VA30
LANDLINES SURFACE JURISDICTION SOURCE AGENCY NAME	JURISOURCE	VA30

LANDLINES SECTION NUMBER (SECTION)

Description

[Required]

A section is a major subdivision of a Public Land Survey System township, normally one mile by one mile in size, containing 640 acres. Non-rectangular subdivisions (such as lots) are also listed under this attribute.

FOIA Category: Public

Annotation

Normally a two-digit numeral, 1 to 36, possibly with a third digit (2) tacked onto the end for any half-sections. Total field length of 7 characters is provided to account for non-rectangular polygons.

e.g.

TR37 = TRACT 37

262 = SECTION 26.5

DC37 = DONATION LAND CLAIM 37

LANDLINES TOWNSHIP RANGE CODE (TWN RNG)

Description

[Required]

A compound attribute showing both Township (Tier) and Range for a particular polygon. A township is defined as a Public Land Survey System unit of land north or south of a baseline. A range is defined as a Public Land Survey System unit of land east or west from a Principal Meridian.

FOIA Category: Public

Annotation

The LR2000 code of the township, which is defined as: 000XZY000XZY;

000 = whole township (or range) numbers, right justified

X = fractional township (range) with 1= 1/4 township (or range)
 2= 1/2 township (or range)
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 0= not a fractional township (or range)

Z = indicator of duplicate township/range

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Y = direction from the baseline (N or S) for townships and direction from the principal meridian (E or W) for range

Note: BLM Cadastral Survey does not recognize 1/4 and 3/4 townships.

LANDLINES TOWNSHIP RANGE NAME (T-R)

Description

[Optional]

Township and Range value that is more user-friendly (easier to read). Used primarily for labeling purposes. For instance, a township which is has the TWNRNG of:

0150N0120W

would be named here as T15N-R12W.

Partial townships are denoted as follows:

1/4 Townships = .25

1/2 Townships = .5

3/4 Townships = .75

FOIA Category: Public

LANDLINES SURFACE JURISDICTION CODE (JURISCODE)

Description

[Required]

Surface management entity that has administrative responsibilities for a geographic location. All parcels of land (including lakes and rivers) must be identified using one of the established codes. Check the Master Title Plats for details.

FOIA Category: Public

List of Values:

BL	BUREAU OF LAND MANAGEMENT
BLML	BUREAU OF LAND MANAGEMENT WITHIN MEANDER LINES
BP	BONNEVILLE POWER ADMINISTRATION
BR	BUREAU OF RECLAMATION
CE	CORPS OF ENGINEERS
CG	U.S. COAST GUARD
DA	U.S. DEPT. OF AGRICULTURE (EXCEPT THE FOREST SERVICE)
DD	U.S. DEPT. OF DEFENSE (EXCEPT THE CORPS OF ENGINEERS)
FS	U.S. FOREST SERVICE
FA	FEDERAL AVIATION ADMINISTRATION
FC	FEDERAL ENERGY REGULATORY COMMISSION
FW	U.S. FISH AND WILDLIFE SERVICE
FWML	U.S. FISH AND WILDLIFE SERVICE WITHIN MEANDER LINES
GS	GENERAL SERVICES ADMINISTRATION
IA	BUREAU OF INDIAN AFFAIRS AND TRIBAL UNITS
LG	LOCAL GOVERNMENT
NP	NATIONAL PARK SERVICE
PV	PRIVATE LANDS
PVI	PRIVATE, INDUSTRIAL
PVML	PRIVATE WITHIN MEANDER LINES
PVN	PRIVATE, NONINDUSTRIAL
PVU	PRIVATE, URBAN
ST	STATE MANAGED LANDS
STF	STATE FORESTS
STL	STATE DIVISION OF LANDS
STML	STATE LANDS WITHIN MEANDER LINE
STP	STATE PARKS
STW	STATE WILDLIFE REFUGES
UN	UNDETERMINED

LANDLINES SURFACE JURISDICTION NAME (JURISNAME)

Description

[Optional]

The name of the surface management agency/organization, company, or individual that has administrative responsibilities for a geographic location.

FOIA Category: Public

Annotation

This would be more specific than the JURISCODE. For instance, private (PV) lands could be identified as to who the private landowner/manager is. Also, the names of parks would be entered here. A name file (Jurisname Master list) is used to control allowable entries and to maintain consistency.

LANDLINES LAND CATEGORY CODE (LANDCATCODE)

Description

[Required]

The category of land as determined by the specific laws that govern use of federal land.

FOIA Category: Public

List of Values:	OC	Revested Oregon and California Railroad lands
	PD	Original public domain and land acquired under FLPMA
	CB	Revested Coos Bay Wagon Road lands
	AQ	Land acquired other than through FLPMA or Bankhead-Jones
	BJ	Land acquired under the Bankhead-Jones
	UN	Undetermined

LANDLINES SURFACE CONVEYANCE RIGHTS CODE (RGTSCODE)

Description

[Required]

Rights granted to or retained by the U.S. Government in a deed or other instrument of conveyance.

FOIA Category: Public

List of Values

Up to four characters, left-justified as follows:

TMBR - Timber

TMBP - Timber in Perpetuity

CNSC - Conservation/Scenic Easement

RECP - Non-Federal lands over which BLM has the right to use or construct roads under 43 CFR 2812 reciprocal

right-of-way agreements.

NONE - None

UN - Undetermined

LANDLINES SUBSURFACE MINERALS CODE (MINCODE)

Description

[Required]

BLM subsurface mineral ownership for a geographic location.

FOIA Category: Public

List of Values:	ACQ	Acquired minerals, All
	ALL	All minerals
	ALX	All minerals except some fractional portion thereof
	COG	Coal, Oil, and Gas
	COL	Coal
	GAS	Gas
	GEO	Geothermal
	GES	Geothermal, sand, and gravel
	GET	Geothermal and thorium
	GEU	Geothermal and unknown
	HRD	Hard rock (locatable) minerals
	NON	None
	OIL	Oil
	O&G	Oil and gas
	OGE	Oil, gas, and geothermal
	OSP	Oil, gas, geothermal, sodium, and potassium
	OTH	Other
	POT	Potassium
	RST	Restricted
	SOD	Sodium
	SOP	Sodium and potassium
	THR	Thorium
	UN	Undetermined
	URA	Uranium
	URT	Uranium and thorium
	XGE	All minerals except geothermal
	XGG	All minerals except oil, gas, and geothermal
	XOG	All minerals except oil and gas
	XSG	All minerals except sand and gravel

LANDLINES PUBLIC LAND SURVEY SOURCE AGENCY NAME (PLSSOURCE)

Description

[Required]

Source agency that provided the PLS data.

FOIA Category: Public

LANDLINES SURFACE JURISDICTION SOURCE AGENCY NAME (JURISOURCE)

Description

[Required]

Source agency providing information about jurisdiction for a landlines polygon.

FOIA Category: Public

SOURCE LINES (ARC ATTRIBUTE TABLE)

Attribute List

Name	Code	Type
LANDLINES SOURCE LAYER CODE	SOURCE LAYER	A3
LANDLINES LINE TYPE CODE	LTYPE	A7

LANDLINES SOURCE LAYER CODE (SOURCE LAYER)

Description

[Required]

The source theme, method, or outside agency that the lines were derived from.

FOIA Category: Public

Check

List of Values:	ADJ	Adjusted WODDB
	CFF	Cartographic Feature Files
	DLG	Digital Line Graph
	GCD	GCDB source with no spatial adjustments
	GP1	Resource Grade GPS
	GP2	Cadastral Grade GPS
	GTR	GTRN, Ground Transportation layer, centerline
	HYD	WODDB Hydrography Layer
	LAK	Lakes layer
	ODR	Oregon Department of Revenue

SRV	Survey
STR	Streams layer, centerline
TRB	WODDB BLM Transportation Layer
WOD	WODDB PLS and Ownership Layers
OTH	Other

LANDLINES LINE TYPE CODE (LTYPE)

Description

[Required]

The type of boundary the line is. May be multiple types.

FOIA Category: Public

Annotation

Seven-character code, each position represents a boundary type. "x" (lowercase) if line is not that boundary type.

Check

List of Values:	S	Section Line
	T	Township (Tier) Line
	J	Juriscode Line
	N	Jurisname Line
	L	Landcategory Line
	R	Other Rights Line
	M	Mineral Rights Line